



## Questions and Answers about Conservation of the Eastern Massasauga Rattlesnake

- Q1. What action has the U.S. Fish and Wildlife Service (Service or we) taken to protect the eastern massasauga rattlesnake?**
- A.** We have designated the eastern massasauga as a "candidate" species. We are also partnering with other natural resource agencies and conservation organizations to research eastern massasauga biology and build upon the status information that we have already gathered. We are sharing with other agencies and land managers information about the snake's biology and what we know about its status. Finally, we are assisting private landowners in managing habitat for the eastern massasauga.
- Q2. What is a "candidate" species?**
- A.** A candidate species is a species that we believe needs the protection of the Endangered Species Act but we have not yet gone through the process of proposing it as a threatened or endangered species.
- Q3. Why did the Service designate the massasauga as a "candidate" species?**
- A.** Many people have seen declines in the numbers and range of the massasauga. Those people include biologists with state natural resource agencies, researchers, collectors, and people who just like snakes. In response to their concerns, we met with a number of people throughout the massasauga's range who had information on its numbers and population locations, we gathered information on past and ongoing surveys, and we conducted an analysis on the potential for the species to become extinct in the future. This information was put together and analyzed in a report called a Status Assessment (available for public review and on our website at [www.fws.gov/r3pao/eco\\_serv/endangrd](http://www.fws.gov/r3pao/eco_serv/endangrd)). We determined that threats to the massasauga still exist, that those threats will cause its numbers and range to continue declining, and as a result of those threats it may become extinct in the future. Therefore, we decided to take the next step to protect this species by designating it a "candidate" species.
- Q4. What are the major threats to the eastern massasauga?**
- A.** Habitat loss is one of the primary factors in the decline of the eastern massasauga. Massasaugas depend on wetlands for food and shelter but often use nearby upland areas during part of the year. Draining wetlands for farms, roads, homes, and urban development has eliminated much of the massasauga habitat in many states. Also, massasaugas are not long distance travelers, so roads, towns, and farm fields prevent them from moving between the wetland and upland habitats that they need. These barriers also separate and isolate remaining populations. Small, isolated populations are often lost due to inbreeding, disease, or severe adverse environmental conditions, such as storms or drought.

A second major factor in the decline of the eastern massasauga is human fear and dislike of snakes which results in people killing large numbers of snakes. Not only are massasaugas killed when they show up near homes or businesses, but people may go out of their way to eliminate them from an area. Indeed, many states had bounties on all rattlesnakes, including massasaugas.

**Q5. What is the current distribution of the eastern massasauga?**

- A.** Massasaugas are found in Illinois, Indiana, Iowa, Michigan, Missouri, New York, Ohio, Pennsylvania, Wisconsin, Ontario and possibly Minnesota.

Although the massasauga may appear to live over a large area, it has suffered marked declines in all those states and in Canada.

- ▶ Of the 203 counties in which massasauga used to be found, 40 percent no longer have any populations.
- ▶ Nine of the 11 states/province that historically had massasauga populations now have less than 50 percent of their historic populations, while the remaining two have lost more than 30 percent of theirs. In fact, there are probably no longer any massasauga in Minnesota.
- ▶ In all states, less than 35 percent of the populations that still exist are healthy.

**Q6. Even if the massasauga is declining and may go extinct, isn't human safety more important than the existence of this snake?**

- A.** Human safety is always top priority and if someone feels threatened by a massasauga they can protect themselves. However we believe that it is in the best interest of all of us to conserve the massasauga. The following are some of the reasons why.
- ▶ The massasauga may have current and future medical benefits. There is ongoing research on rattlesnake venom and its potential to treat a variety of diseases and also use of rattlesnake venom as an anticoagulant.
  - ▶ The fact that the massasauga is declining is a warning bell that there are problems with our natural communities. By conserving the massasauga we can address some of those problems and protect human interests in wetlands and natural areas preservation.
  - ▶ Rattlesnakes, which feed primarily on small mammals, help keep rodent populations in check and prevent the spread of rodent-transmitted diseases.
  - ▶ Massasauga are members of natural communities that evolve over time. If the massasauga is removed from those communities the result may have negative impacts for humans.

Additionally, massasauga bites are rare and usually not life threatening. The Service has a fact sheet entitled "Eastern Massasauga Rattlesnake - Why Conserve a Poisonous Snake?" that provides more information on the frequency and toxicity of massasauga bites.

**Q7. Are "candidate" species protected by Federal law?**

- A.** No, candidate species do not receive the protection of any Federal law. However the "candidate" status gives Federal and state agencies as well as other groups, organizations, and private landowners notice that this species is in trouble and may need protection in the future. Thus any of these groups or individuals may volunteer to carry out conservation actions for the massasauga.

**Q8. Now that the Service has designated the massasauga as a "candidate," what will happen next?**

- A.** When a species becomes a candidate it is given a "listing priority number." This number is given because there is not enough Service personnel, time, or money to propose all the candidate species for listing. The purpose of the "listing priority number" is to ensure that the species that are in the most trouble are given the highest priority. The eastern massasauga has been assigned a listing priority number of 9. This number means that there will be a one to two-year delay while the Service addresses higher priority listing actions. During that time, we will promote conservation of the species to start its recovery before it is listed. If pre-listing conservation of the massasauga is successful during the next two years, the possibility exists that it may not have to be listed.

**Q9. If the Service decides to go forward with listing the massasauga as threatened or endangered, what is the process?**

**A.** The Service would prepare a document, called a proposed rule, that would be published in the Federal Register and made available for public review. The public would be given at least 60 days to review the proposal and provide the Service with any comments or additional information. During this 60 day period, the Service would advertise in newspapers and on the internet that the proposal has been published and that the public is invited to comment on the proposal. Also, public hearings would likely be held to gather public input. After the comment period ends, the Service would consider and analyze all the public comments to make a final decision on whether to list the massasauga as a threatened or endangered species.

**Q10. What do I do if I see an eastern massasauga?**

**A.** If you encounter an eastern massasauga rattlesnake, observe it from a distance and do not disturb or try to capture it. Massasauga are generally docile animals and, unless harassed, will usually remain still or hide. When you are ready, turn around and walk the other way. Report any sightings to your state natural resource agency. This will help us track the species and locate new areas where it is found. If you want more information on how to avoid being bitten and what to do if you are bitten by a massasauga or how to keep them away from your property, please see our fact sheet “Eastern Massasauga Rattlesnake - Why Conserve a Poisonous Snake.”

**Q11. What can I do to help conserve the eastern massasauga?**

**A.** The Service is doing several things to conserve the eastern massasauga. You can participate in the following ways:

- ▶ Contact your local U.S. Fish & Wildlife Service state office or your state natural resource agency if you see an eastern massasauga.
- ▶ Volunteer to participate in habitat management activities on lands where agencies, groups, or individuals are interested in managing for the eastern massasauga.
- ▶ Share information about eastern massasauga biology and status.
- ▶ Share your concerns with U.S. Fish & Wildlife Service and state natural resource agency staff so that we can address them in the process of planning for massasauga recovery.

**Q12. How do I learn more about the eastern massasauga?**

**A.** To learn more about the eastern massasauga, visit the Service’s website at [www.fws.gov/r3pao/eco\\_serv/endangrd](http://www.fws.gov/r3pao/eco_serv/endangrd) ; write to the U.S. Fish & Wildlife Service - Endangered Species Division, 1 Federal Drive, Fort Snelling, MN 55411; or call 612/713-5350.